

**Claims**

1. The use of a conjugate comprising a carboxyl group-containing organic compound and a protein for  
5 producing a pharmaceutical for modulating a transplantation-associated immune response.
2. The use as claimed in claim 1 for producing a  
10 pharmaceutical for preventing a transplantation-associated immune response.
3. The use as claimed in claim 1 or 2 for producing a  
15 pharmaceutical for the prophylaxis or/and treatment of GVHD (graft versus host disease).
4. The use as claimed in claim 3, characterized in  
that GVHD is an acute GVHD.
5. The use as claimed in claim 3, characterized in  
20 that GVHD is a chronic GVHD.
6. The use as claimed in any of the preceding claims,  
characterized in that the transplantation is a bone  
25 marrow transplantation.
7. The use as claimed in any of claims 1 to 5,  
characterized in that the transplantation is an organ  
transplantation, in particular a kidney, heart or liver  
30 transplantation.
8. The use as claimed in any of the preceding claims,  
characterized in that an allogeneic transplantation is  
involved.
- 35 9. The use as claimed in any of the preceding claims,  
characterized in that the carboxyl group-containing  
organic compound is selected from cytostatics or  
immunosuppressants.

10. The use as claimed in any of the preceding claims, characterized in that the carboxyl group-containing organic compound is methotrexate or aminopterin.

5 11. The use as claimed in any of the preceding claims, characterized in that the polypeptide is a native human polypeptide.

10 12. The use as claimed in any of the preceding claims, characterized in that the polypeptide is albumin, in particular human albumin.

15 13. The use as claimed in any of the preceding claims, characterized in that the conjugate is a methotrexate-albumin conjugate.

14. A method for preparing a conjugate comprising  
i) a carboxyl group-containing organic compound and  
ii) a protein,  
20 characterized in that a carboxyl group-containing organic compound and a protein are reacted in the presence of 1-ethyl-3-(3-dimethylaminopropyl)carbodiimide and of N-hydroxysuccinimide.

25 15. The method as claimed in claim 14, characterized in that the carboxyl group-containing organic compound is a cytostatic or an immunosuppressant.

30 16. The method as claimed in claim 14 or 15, characterized in that the carboxyl group-containing organic compound is methotrexate.

17. The method as claimed in any of claims 14 to 16, characterized in that the protein is albumin.

35 18. The method as claimed in any of claims 14 to 17, characterized in that the carboxyl group-containing organic compound is activated in an organic solvent, in particular in an anhydrous organic solvent, with

1-ethyl-3-(3-dimethylaminopropyl)carbodiimide and N-hydroxysuccinimide, and then the activated carboxyl group-containing organic compound is reacted with the protein.

5

19. A method for preparing a conjugate comprising  
i) a carboxyl group-containing organic compound and  
ii) a protein,  
characterized in that a carboxyl group-containing  
10 organic compound and a protein are reacted in the  
presence of 1-ethyl-3-(3-dimethylamino-  
propyl)carbonyldiimide.

20. The method as claimed in claim 19, characterized  
15 in that the carboxyl group-containing organic compound  
is a cytostatic or an immunosuppressant.

21. The method as claimed in claim 19 or 20,  
characterized in that the carboxyl group-containing  
20 organic compound is methotrexate, aminopterin and/or  
N-phthaloyl-L-glutamic acid.

22. The method as claimed in claim 21, characterized  
in that the carboxyl group-containing organic compound  
25 is methotrexate.

23. The method as claimed in any of claims 19 to 22,  
characterized in that the protein is albumin.

30 24. The method as claimed in any of claims 19 to 23,  
characterized in that the carboxyl group-containing  
organic compound is reacted in an organic solvent, in  
particular in an anhydrous organic solvent, with  
1-ethyl-3-(3-dimethylaminopropyl)carbodiimide, is  
35 activated by heating and then the activated carboxyl  
group-containing organic compound is reacted with the  
protein.